

WEST☐

L6: Entry 3 of 14

File: USPT

Nov 21, 2000

US-PAT-NO: 6150421

DOCUMENT-IDENTIFIER: US 6150421 A

TITLE: Treatment of estrogen-receptor positive breast cancer and estrogen-receptor negative breast cancer with retinoid with CH.sub.2 OH at the side chain terminal position

DATE-ISSUED: November 21, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gudas; Lorraine	New York	NY		
Derguini; Fadila	New York	NY		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Cornell Research Foundation, Inc.	Ithaca	NY			02

APPL-NO: 09/ 088770 [PALM]

DATE FILED: June 2, 1998

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application claims the benefit of U.S. Provisional Application No. 60/050,090, filed Jun. 18, 1997 and is a continuation-in-part of Application Ser. No. 08/371,535, filed Jan. 11, 1995, now U.S. Pat. No. 5,786,391.

INT-CL: [07] A61 K 31/12, A61 K 31/11

US-CL-ISSUED: 514/690; 514/723, 514/729

US-CL-CURRENT: 514/690; 514/723, 514/729

FIELD-OF-SEARCH: 514/690, 514/723, 514/729

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>3931257</u>	January 1976	Pawson	554/218
<input type="checkbox"/>	<u>5124083</u>	June 1992	Shealy	514/529
<input type="checkbox"/>	<u>5786391</u>	July 1998	Gudas et al.	514/690
<input type="checkbox"/>	<u>5962534</u>	October 1999	Gudas et al.	514/690

OTHER PUBLICATIONS

Sheikh et al., "Why are estrogen-receptor-negative breast cancers more aggressive than estrogen-receptor-positive breast cancers?", *Invasion and Metastasis*, vol. 14/1-6: 329-336, 1994.

Fitzgerald et al., "Retinoic acid receptor alpha expression correlates with retinoid-induced growth inhibition of human breast cancer cells regardless of estrogen receptor status.", *Cancer Research*, vol. 57(13): 2642-2650, 1997.

Achkar, C. C., et al., *Proc. Nat'l Acad. Sci. USA*, vol. 93, pp. 4879-4884, May 1996.

Chen, A. A., et al., *Cancer Research* 57, 4642-4651 (Oct. 15, 1997).

Hong, W. K., et al., "Retinoids and Human Cancer" in *The Retinoids, Biology, Chemistry and Medicine*, 2nd edition, edited by Sporn, M. B., et al., Raven Press Ltd., New York, 1994, pp. 597-630.

ART-UNIT: 163

PRIMARY-EXAMINER: Lee; Howard C.

ABSTRACT:

Certain retinoids with CH₂OH at the side chain terminal position, preferably 4-oxoretinol, inhibit growth of estrogen-receptor positive and estrogen-receptor negative breast cancer tumor cell lines and have utility for adjuvant therapy and treatment of metastatic disease.

14 Claims, 9 Drawing figures

WEST Search History

09/586, 235

Examiner: Rawlings, S.

Art Unit: 1642

DATE: Wednesday, September 11, 2002

Set Name Query

side by side

Hit Count Set Name

result set

DB=USPT; PLUR=YES; OP=OR

L24	retinoid adj therapy and (photodynamic or photosensit\$)	2	L24
L23	ATRA adj therapy and (photodynamic or photosensit\$)	0	L23
L22	differentiation adj therapy and photodynamic	0	L22
L21	differentiation adj therapy and photosensit\$	0	L21
L20	L16 and photodynamic	0	L20
L19	L16 and photosensit\$	0	L19
L18	L16 and (benzoporphyrin or chlorin or porphyrin or photodynamic or photoactiv\$ or photochemical or photothermal or 5-ala)	4	L18
L17	L16 and (benzoporphyrin or chlorin or porphyrin or photodynamic or photoactiv\$ or photochemical or photothermal or 5-ala or atra)	10	L17
L16	differentiation adj therapy same cancer	47	L16
L15	l12 and (retinoid or retinoic or vitamin adj a or atra or dimethylsulfoxide or dms0)	28	L15
L14	l12 and ((retinoid or retinoic or vitamin adj a) or differentiating adj agent)	2	L14
L13	l12 and ((retinoid or retinoic or vitamin adj a) or differentiating agent)	47	L13
L12	((benzoporphyrin or chlorin or porphyrin or photodynamic or photoactiv\$ or photochemical or photothermal) same l2).clm.	64	L12
L11	((chlorin or porphyrin or benzoporphyrin) same (retinoid or retinoic or vitamin adj a))	33	L11
L10	((chlorin or porphyrin or benzoporphyrin) same (retinoid or retinoic or vitamin adj a)) same l2	4	L10
L9	((chlorin or porphyrin or benzoporphyrin) and (retinoid or retinoic or vitamin adj a)).clm.	5	L9
L8	L3 and (benzoporphyrin or chlorin or porphyrin or photodynamic or photoactiv\$ or photochemical or photothermal)	12	L8
L7	L6 and (benzoporphyrin or chlorin or porphyrin or photodynamic or photoactiv\$ or photochemical or photothermal)	0	L7
L6	(l1 and l2).ti.	14	L6
L5	l1.ti.	410	L5
L4	L3 and photodynamic	4	L4
L3	(l1 and l2).clm.	118	L3
L2	cancer or tumor or malignan\$ or metasta\$ or carcinoma or sarcoma or hyperplas\$ or benign	83769	L2
L1	ATRA or retinoic adj acid or retinoid	4364	L1